HAHN AND ASSOCIATES, INC.

ENVIRONMENTAL CONSULTANTS

March 15, 2013

Mr. Dana Bayuk
Oregon Department of Environmental Quality
Northwest Region, Portland Office
Portland Harbor Section
2020 SW Fourth Avenue, Suite 400
Portland Oregon 97201-4987

HAI Project No. 2708 DEQ ECSI File No. 84

SUBJECT: Progress Report, NW Natural Gasco Property, 7900 NW St. Helens Avenue, Portland, Oregon

Dear Mr. Bayuk:

Hahn and Associates, Inc. (HAI) has prepared this monthly Progress Report summarizing Remedial Investigation/Feasibility Study (RI/FS) and source control-related work activities conducted by NW Natural that have occurred relating to the Gasco property during the month of February 2013. NW Natural is completing upland investigatory activities at the subject property under the Voluntary Agreement No. ECVC-WMCVC-NWR-94-13 (Voluntary Agreement) between NW Natural and the Oregon Department of Environmental Quality (DEQ).

1.0 Communications and Document Submittals

In memoranda dated February 4, 11, 18, and 25 (John Renda to Dana Bayuk), Anchor QEA provided DEQ with weekly updates and field work notifications as related to the Gasco source control construction progress.

In correspondence dated February 13, 2013 (Dana Bayuk to Bob Wyatt), DEQ provided comments from review of the March 2012 Anchor QEA document entitled *Work Plan, Human Health and Ecological Risk Assessment, NW Natural Gasco Site*, as supplemented May 29, 2012.

In e-mail correspondence dated February 14, 2013 (Dana Bayuk to Ben Hung), DEQ confirmed that the next scheduled technical meeting falls on a State holiday. DEQ suggested rescheduling this meeting to occur in early March (scheduled for March 18).

In e-mail correspondence dated February 22, 2013 (Ben Hung to Dana Bayuk), NW Natural confirmed a technical meeting proposed for March 6, 2013 to discuss the Risk Assessment Work Plan.

In e-mail correspondence dated February 26, 2013 (Rob Ede to Dana Bayuk) HAI, on behalf of NW Natural, provided notice to DEQ regarding planned field activities related to the first quarter 2013 groundwater monitoring program at the Gasco and Siltronic properties.

2.0 Field Work

Field activities related to monitoring and maintenance of the dense non-aqueous phase liquid (DNAPL) extraction system at surficial fill well locations MW-6-32 and MW-13-30 occurred during February. The system recovered 9 gallons of fluids, primarily DNAPL, during this time. Approximately 2.5 gallons of DNAPL were manually removed from well PW-01-80 during February. The computer controlling the automated DNAPL extraction

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system was replaced during February due to malfunctions that prevented the system from completing all of the programmed pumping cycles.

Discharge of treated water (groundwater from the LNG containment basin) to the City of Portland sanitary sewer was initiated on March 16, 2007 under Temporary Wastewater Discharge Permit 500.022 (expires February 15, 2017). Results from NW Natural's effluent sampling are provided to BES in Discharge Monitoring Reports that are submitted for any month that effluent sampling occurs – which is at least quarterly in accordance with the permit. As of February 28, 2013 a total of 1,846,933 gallons of treated water have been discharged to the sanitary sewer in 2013.

Construction of the groundwater source control extraction system and wastewater treatment building continued during February. A summary of the source control construction work completed each week and the work anticipated over the next two week period is provided in weekly memoranda to DEQ.

3.0 Anticipated Activities in March and April 2013

NW Natural and DEQ technical working group communications and meetings are anticipated to occur as needed during March and April 2013 to discuss ongoing project tasks.

Construction related activities associated with the groundwater source control system will be conducted during this timeframe, with wastewater treatment plant construction and installation of alluvium water-bearing zone extraction wells continuing into the second quarter of 2013.

The following reports and work plans for the Site have been submitted to DEQ through the date of this progress report. Unless otherwise noted, NW Natural has not received DEQ comments on these documents.

- Source Control Evaluation Report, "Segment 3" Siltronic Property Related to NW Natural "Gasco" Site, February 19, 2009, Anchor QEA. Based on DEQ feedback, DEQ review of this document is prioritized behind reviews for Segments 1 and 2 Source Control Design documents and upland risk assessment-related reviews.
- Final Stormwater Source Control Data Summary Report, September 2010, Anchor QEA. Based on DEQ feedback, DEQ review of this document is prioritized behind reviews for Segments 1 and 2 source control design documents and upland risk assessment-related reviews.
- Remedial Investigation Data Summary Report, Historical Manufactured Gas Plant Activities, Siltronic Corporation Property, March 31, 2011, HAI. Based on DEQ feedback, it is understood that DEQ review is being conducted at this time, but the priority is lower than source control and risk assessment items.
- Supplemental Remedial Investigation Field Sampling Activities, Doane Creek Embankment Soil and Sediment, Siltronic Corporation Property, dated March 29, 2012 (HAI, 2012).
- Supplemental Remedial Investigation Field Sampling Activities, DNAPL Characterization, Siltronic Corporation Property, dated April 23, 2012 (HAI, 2012).

- Discharge of Groundwater Monitoring Purge Water, NW Natural Gasco Property, dated May 24, 2012 (HAI, 2012).
- Supplemental Remedial Investigation Field Sampling Activities, Groundwater Monitoring Well Installations, Siltronic Corporation Property, dated July 23, 2012 (HAI, 2012).

Should you have any questions, please contact the undersigned.

-Sincerely,

Rob Ede, R.G.

Principal

robe@hahnenv.com

c: Ms. Sandra Hart, NW Natural (electronic only)

Mr. Bob Wyatt, NW Natural (electronic only)

Ms. Patty Dost, Pearl Legal Group PC (electronic only)

Ms. Sarah Riddle, Pearl Legal Group PC (electronic only)

Mr. Carl Stivers, Anchor QEA, L.L.C. (electronic only)

Mr. John Edwards, Anchor QEA, L.L.C. (electronic only)

Mr. Ben Hung, Anchor QEA, L.L.C. (electronic only)

Mr. Ryan Barth, Anchor QEA, L.L.C. (electronic only)

Mr. Henning Larsen, DEQ NW Region (electronic only)

Mr. Tom Gainer, DEQ NW Region (electronic only)

Mr. Tom McCue, Siltronic Corporation (electronic only)

Ms. Kristine Koch, Region 10 EPA (electronic only)

Mr. Sean Sheldrake, Region 10 EPA (electronic only)

Mr. Rene Fuentes, Region 10 EPA (electronic only)

Mr. Chip Humphrey, Region 10 EPA (electronic only)

Mr. Lance Peterson, CDM, Inc. (electronic only)